



*Ifu*

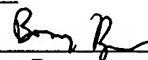
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	:
Roch Listz MAURICE, et al.	:
Appl. No.: 10/588,421 ✓	: Art Unit: To be assigned
Filed: August 4, 2006	: Examiner: To be assigned
For: METHOD AND SYSTEM FOR	: Atty. Docket: BCM-009US
VASCULAR ELASTOGRAPHY	:

**CERTIFICATE OF MAILING**

I hereby certify that the foregoing documents are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 6, 2007.

  
Name: Bonny Rogers

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO-1449, or substitute thereof, is a listing of documents known to Applicants and/or their attorney in compliance with the requirements of 37 C.F.R. 1.56. Copies of the documents are also being submitted, except for U.S. patents and published applications as provided under 37 C.F.R. 1.98(2)(ii).

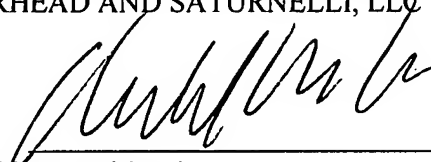
In accordance with 37 C.F.R. 1.97, this Information Disclosure Statement is being filed before the mailing of a First Office Action on the merits or within three months of the filing date of the above-referenced U.S. application, therefore NO FEE is due. In addition, non-English language reference CRR is mentioned in the specification of this application.

The Examiner is respectfully requested to initial the space adjacent to each document on the PTO-1449 form and return a copy of the PTO-1449 form to confirm that these documents have been considered by the Examiner and made of record in this application.

Although we believe that we have appropriately provided for any fees due in connection with this submission, the Commissioner is authorized to credit any overpayment or charge any deficiencies to/from our **Deposit Account No. 503596**. Two originally-executed copies of this form are being submitted.

Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at (508) 898-8603.

Respectfully submitted,  
MUIRHEAD AND SATURNELLI, LLC



Date: September 6, 2007

Donald W. Muirhead  
Registration No. 33,978

Muirhead and Saturnelli, LLC  
200 Friberg Parkway, Suite 1001  
Westborough, MA 01581  
Phone: (508) 898-8601  
Fax: (508) 898-8602  
**Customer No.: 54004**

Substitute for Form 1449/PTO

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Application Number 10/588,421

Filing Date August 4, 2006

First Named Inventor Roch Listz MAURICE

Art Unit To be assigned

Examiner Name To be assigned

Attorney Docket No. BCM-009US

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

(Use as many sheets as necessary)

**U.S. PATENT DOCUMENTS**

EXAMINER INITIALS *	ATTY. CITE NO.	DOCUMENT NUMBER	ISSUE/PUBLICATION DATE MM-DD-YYYY	NAME OF APPLICANT OF CITED DOCUMENT	CLASS	SUB- CLASS

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIALS *	ATTY. CITE NO.	DOCUMENT NUMBER	PUBLICATION DATE MM-DD-YYYY	COUNTRY	TRANSLATION	
					YES	NO

**NON-PATENT LITERATURE DOCUMENTS**

EXAMINER INITIALS *	atty. Cite no.	Include Author, Title, Date, Vol/Issue No., Country of publication, Pages, etc.
	CA	Bang J., Dahl T., Bruinsma A., Kaspersen J. H. Hernes T. A. N., Myhre H. O. (2003), "A new method for analysis of motion of carotid plaques from RF ultrasound images", <i>Ultrasound in Med. &amp; Biol.</i> , Vol. 29, No. 7, pp. 967-976.
	CB	Brusseau E., Fromageau J., Finet G., Delachartre P., and Vray D. (2001), "Axial strain imaging of intravascular data: Results on polyvinyl alcohol cryogel phantoms and carotid artery", <i>Ultrasound in Medicine &amp; Biology</i> , Vol. 27, No. 12, pp. 1631-1642.
	CC	Zaman A.G., Helft G., Worthley S.G., Badimon J.J. (2000), "The role of plaque rupture in coronary artery disease", <i>Atherosclerosis</i> , Vol. 149, pp. 251-266.
	CD	Cheng, G. C. Loree, H., M., Kamm, R. D., Fishbein, M.C., Lee, R.T. (1993), "Distribution of circumferential stress in ruptured and stable atherosclerotic lesions: a structural analysis; with histopathological correlation," <i>Circulation</i> , Vol. 87, No. 4, pp. 1179-1187.
	CE	Chu K.C. and Rutt B.K (1997), "Polyvinyl alcohol cryogel: An ideal phantom material for MR studies of arterial flow and elasticity". <i>Magn. Reson. In Med.</i> , Vol. 37, pp. 314-319.
	CF	Davies J.M. and Thomas A.C. (1985), "Plaque fissuring: The cause of acute myocardial infarction, sudden ischaemic death, and crescendo angina", <i>Br. Heart J.</i> , Vol. 53, pp. 363-373.
	CG	de Korte C. L., Céspedes E. I., Van der Steen A. F. W., and Lancée C. T. (1997), "Intravascular elasticity imaging using ultrasound - Feasibility studies in phantoms", <i>Ultrasound in Medicine &amp; Biology</i> , Vol. 23, No. 5, pp. 735-746.
	CH	de Korte C. L., Vafi der Steen A. F. W., Céspedes E. I., and Pasterkamp G. (1998), "Intravascular ultrasound elastography in human arteries: Initial experience in vitro," <i>Ultrasound in Medicine &amp; Biology</i> , Vol. 24, No. 3, pp. 401-408.

**EXAMINER SIGNATURE:****DATE CONSIDERED:**

\*EXAMINER: Initial if referenced considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not considered. Include copy of this form with next communication to applicant.

<b>Substitute for Form 1449/PTO</b> U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT          BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>	Application Number	10/588,421
	Filing Date	August 4, 2006
	First Named Inventor	Roch Listz MAURICE
	Art Unit	To be assigned
	Examiner Name	To be assigned
	Attorney Docket No.	BCM-009US

### NON-PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS *	ATTY. CITE NO.	INCLUDE AUTHOR, TITLE, DATE, VOL/ISSUE NO., COUNTRY OF PUBLICATION, PAGES, ETC.
	CI	de Korte C. L. Pasterkamp G., Van der Steen A. F. W., Woutman H. A., and Bom N. (2000a), "Characterization of plaque components with intravascular ultrasound elastography in human femoral and coronary arteries in vitro", <i>Circulation</i> , Vol. 102, No. 6, pp. 617-623.
	CJ	de Korte C. L., Van der Steen A. F. W., Céspedes E. I., Pasterkamp G., Carlier S. G., Mastik F., Schoneveld A. H., Serruys P. W., and Bom N. (2000b), "Characterization of plaque components and vulnerability with intravascular ultrasound elastography," <i>Physics in Medicine &amp; Biology</i> , Vol. 45, No. 6, pp. 1465-1475.
	CK	Delachartre P., Gachard C, Finet G., Gerfault L. Vray D. (1999), "Modeling geometric artefacts in Intravascular Ultrasound Imaging", <i>Ultrasound in Medicine and Biology</i> , Vol. 25, No. 4, pp. 567-575.
	CL	Falk E. (1989), "Morphologic features of unstable atherosclerotic plaques underlying acute [coronary syndromes]", <i>Am. J. Cardiol.</i> , 63(suppl E), pp. 114E-120E.
	CM	Falk E. (1992), "Why do plaques rupture?", <i>Circulation</i> , Vol. 86(suppl. III), pp. 30-42.
	CN	Fisher A., Gustein D.E., Fayad Z.A., Fuster V. (2000), "Predicting plaque rupture: enhancing diagnosis and clinical decision-making in coronary artery disease", <i>Vasc. Med</i> : Vol. 5, pp. 163-172.
	CO	Foster F. S., Zhang M. Y., Zhou Y. Q, Liu G., Mehi J., Chérin E., Harasiewicz K. A., Starkoski B. G., Zan L, Knapik D. A., and Adamson S. L. (2002), "A new ultrasound instrument for in vivo microimaging of mice," <i>Ultrasound in Med. &amp; Biol.</i> , Vol.- 28, No. 9, pp. 1165-1172.
	CP	Fung Y.C. <u>Biomechanical properties of living tissues</u> . 2 <sup>nd</sup> Ed., "Mechanical Properties and Active Remodeling of Blood Vessels", New York: Springer Verlag, 1993, pp. 321-391.
	CQ	Garra B. S., Céspedes E. I., Ophir J., Sprat, S. R., Zuurbier R. A., Magnant C. M., and Pennanen M. F. (1997), "Elastography of breast lesions: initial clinical results", <i>Radiology</i> , Vol. 202, No. 1, pp. 79-86.
	CR	Goud C, Pitt B., Webb R.C., Richey J.M. (1998J), "Synergistic actions of insulin and troglitazone on contractility in endothelium-denuded rat aortic rings", <i>Am. Physiol. Soc.</i> , Vol. 275 (Endocrinol Metab. 38), pp. E882- E887.
	CS	Hamet P., Pausova Z., Tremblay J., Deng A. (2002), "Hypertension as a genetic disease", In: <i>Hypertension Manual</i> , Chapter 2.2, Mancia G., 20 Chalmers J., Ferrari A., Julius S., Saruta T., and Weber M., Eds, Harcourt Brace and Co. Ltd, Robert Stevenson House, Scotland, UK.
	CT	Zhao J., Day J., Yuan Z.F., Gregersen H. (2002), "Regional artery stress-strain distributions referenced to the zero-stress state in the rat", <i>Am. J. Physiol., Heart Circ. Physiol.</i> , Vol. 282, pp. H622-H629.
	CU	Horn B. K. P. (1986), "Robot Vision", <i>McGraw-Hill Company</i> , pp. 278-298.
	CV	Intengan H.D., He G., Schiffrin E.L. (1998a), "Effect of vasopressin antagonism on structure and mechanics of small arteries and vascular expression of endothelin-1 in deoxycorticosterone acetate-salt hypertensive rats", <i>Hypertension</i> , Vol. 32, pp. 770-777.
	CW	Intengan H.D., Schiffrin E.L. (1998b), "Mechanical properties of mesenteric resistance arteries from Dahl salt-sensitive rats: role of endothelin-1", <i>Journal of Hypertension</i> , Vol. 16, pp. 1907-1912.
	CX	Johns D.G., Jin J-S, Webb R.C. (1998), "The role of the endothelium in ceramide-induced; vasodilation", <i>European Journal of Pharmacology</i> , Vol. 349, pp. R9-R10.
	CY	Kanai H., Hasegawa H., Ichiki M., Tezuka F., Kolwa Y. (2003), "Elasticity imaging of atheroma with transcutaneous ultrasound: Preliminary study", <i>Circulation</i> , Vol. 107, No. 24, pp. 3018-3021.
	CZ	Le Mehaute B. <u>An introduction to hydrodynamics and water waves</u> . New-York: Springer-Verlag, 1976, pp. 18-20.

<b>EXAMINER SIGNATURE:</b>	<b>DATE CONSIDERED:</b>
*EXAMINER: Initial if referenced considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not considered. Include copy of this form with next communication to applicant.	

<b>Substitute for Form 1449/PTO</b>  <b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>	Application Number	10/588,421
	Filing Date	August 4, 2006
	First Named Inventor	Roch Listz MAURICE
	Art Unit	To be assigned
	Examiner Name	To be assigned
	Attorney Docket No.	BCM-009US

### NON-PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS *	ATTY. CITE NO.	INCLUDE AUTHOR, TITLE, DATE, VOL/ISSUE NO., COUNTRY OF PUBLICATION, PAGES, ETC.
	CAA	Lee, R. T., Loree, H. M., Cheng, G. C., Lieberman, E.H., Jaramillo, N., Schoen, F.J. (1993), "Computational structural analysis based on intravascular ultrasound imaging before in vitro angioplasty: prediction of plaque fracture locations," <i>J. Am. Coll. Cardiol.</i> , Vol. 21, No. 3, pp. 777-782.
	CBB	Levenberg, K. (1063). "A method for the solution of certain non-linear problems in least-squares," <i>Q. Appl. Math.</i> , Vol. 2, No. 2, pp. 164-168.
	CCC	Loree, H. M., Kamm, R. D., Stringfellow, R. G., Lee, R.T. (1992), "Effects of fibrous cap thickness on peak circumferential stress in model atherosclerotic vessels," <i>Circ Res</i> , Vol. 71, No. 4, pp. 850-858.
	CDD	Mai J. J., Insana M. (2002), "Strain imaging of internal deformation", <i>Ultrasound in. Med. &amp; Biol.</i> , Vol, 28, Nos. 11/12 pp. 1475-1484.
	CEE	Marquardt, D. W. (1944). "An algorithm for least-squares estimation of non-linear parameters," <i>J. SIAM</i> , Vol. 11, No. 2, pp. 431-441.
	CFF	Mase G. E. <u>Theory and problems of continuum mechanics</u> . Schaum's Outline Series, McGraw-Hill, New York, 1970.
	CGG	Maurice R. L. and Bertrand M. (1999), "Lagrangian speckle model and tissue motion estimation - Theory," <i>IEEE Transactions on Medical Imaging</i> , Vol. 18, No. 7, pp. 593-603.
	CHH	Maurice R. L. et al. (2004b), « Non-Invasive Elasticity Imaging in Small Vessels : Validation on Tissue-Mimicking Phantoms », Medical Imaging 2004, Ultrasonic Imaging and Signal Processing, Proceedings of SPIE, W.F. Walker and S.Y. Emelianov Eds. Vol. 5373, pp. 184-192.
	CII	Ohayon J., Teppaz P., Finet G., Rioufol G. (2001), "In-vivo prediction of human coronary plaque rupture location using intravascular ultrasound and the finite element method", <i>Coronary Artery Disease</i> , Vol. 12, pp. 655-663.
	CJJ	Ophir J., Céspedes E. I., Ponnekanti H., Yazdi Y., and Li X. (1991), "Elastography: a quantitative method for imaging the elasticity in biological tissues", <i>Ultrasonic Imaging</i> , Vol. 13, No. 2, pp. 111-134.
	CKK	Ophir J., Alam S. K., Garra B., Kallel F., Konofagou E., Krouskop T., and Varghese T. (1999), "Elastography: ultrasonic estimation and imaging of the elastic properties of tissues," <i>Proceedings of the Institution of Mechanical Engineers. Part H - Journal of Engineering in Medicine</i> , Vol. 213, No. H3, pp. 203-233.
	CLL	Ryan L.K. and Foster F. S. (1997), "Ultrasonic measurement of differential displacement strain in a vascular model," <i>Ultrasonic Imaging</i> , Vol. 19, No. 1, pp.: 19-38.
	CMM	Shapo B.M., Crowe J.R., Skovoroda A.R., Eberle M.J., Conn N.A., O'Donnell M. (1996a), "Displacement and strain imaging of coronary arteries with intraluminal ultrasound", <i>IEEE Transactions on Ultrasonics, Ferroelectrics, &amp; Frequency Control</i> , Vol. 43(2), pp. 234-246.
	CNN	Shapo B.M., Crowe J.R., Erkamp R., Emelianov S.Y., Eberle M.J., O'Donnell M. (1996b), "Strain imaging of coronary arteries with intraluminal ultrasound: Experiments on an inhomogeneous phantom", <i>Ultrasonic Imaging</i> Vol. 18(3), pp. 173-191.
	COO	Si X., Webb R.C., Richey J.M. (1999), "Bezafibrate, an anti-hypertriglyceridemic drug, attenuates vascular hyperresponsiveness and elevated blood pressure in fructose-induced hypertensive rats", <i>Can. J. Physiol. Pharmacol.</i> , Vol. 77, pp. 755-762.
	CPP	Tatchum-Talom R., Martel C., Marette A. (2001), "Influence of estrogen on aortic stiffness and endothelial function in female rats", <i>Am. J. Physiol., Heart Circ. Physiol.</i> Vol. 282, pp. H491-H498.

**EXAMINER SIGNATURE:**

**DATE CONSIDERED:**

\*EXAMINER: Initial if referenced considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not considered. Include copy of this form with next communication to applicant.

